

Proposed Sewer Rate Increases

City of Springfield

Department of Environmental Services

August 30, 2016





Award Winning Program For Personnel

Jim Burks - Laboratory Supervisor at the SWTP

Chair MWEA Laboratory Practices Committee

MWEA Executive Board

Member of the American Chemical Society

Ronnie Box – Operations Supervisor at the SWTP

Vice Chair of the MWEA Operators Committee

Quarter Century Operator Award

2014 MWEA Operator of the Year Award

MWEA is Missouri Water Environment Association



Award Winning Program For Personnel

Bruce Hinkston – Operations Supervisor for the NWTP
2015 MWEA Operator of the Year Award

Stephanie Gott – Plant Biologist
Member of the MWEA Laboratory Practices Committee
2014 MWEA Laboratory Analyst of the Year

Kevin Cline
Member of the MWEA Laboratory Practices Committee
2015 MWEA Laboratory Analyst of the Year



Award Winning Program For Facilities

South West Treatment Plant (SWTP)

NACWA for Wilsons Creek Conservation Zone

2015 NACWA Peak Performance Award

2013 Plant of the Year Award for a Large Facility

2013 Biosolids Management Award

North West Treatment Plant (NWTP)

2015 NACWA Peak Performance Award

Collection System

NACWA for Private Inflow and Infiltration Program

ACEC – Private Inflow and Infiltration Program for
Engineering Excellence

NACWA is the National Association of Clean Water Agencies

ACEC is the American Council of Engineering Companies



Permit Limit Comparison

Not a level Playing Field

	Springfield	Jefferson City	St. Louis	Kansas City	Columbia
BOD Weekly Avg.	15	45	40	60	45
BOD Monthly Avg.	10	30	25	40	30
TSS Weekly Avg.	20	45	45	60	45
TSS Monthly Avg.	15	30	30	40	30
Ammonia	1.3	No Limit	No Limit	45.1	No Limit
E-Coli Weekly Avg.	126	1030	1030	1030	No Limit
E-Coli Monthly Avg.	126	206	206	206	No Limit



2015 to 2025 Springfield's Plan

Outcomes

- System overflow reduction
- Continue removing rainwater from the system
- Continue to gather data and evaluate the system to determine the appropriate capacity improvements
- Ensures WWTP's continue production of high-quality effluent and meet permit requirements
- Funding for MS4 compliance
- Approach a level of funding are consistent with Integrated Planning Process and timing



Take Away Points

Funding Springfield's Plan is necessary to comply with the Clean Water Act

These improvements are necessary to protect water quality in Southwest Missouri

Our Plan will stabilize user fees for the next 10 years

Our Plan will address Springfield's aging infrastructure



Springfield's Plan Includes Three Phases

Phase 1 – Foundation projects (2016-2020).

Phase 2 – Advanced Action projects (2021-2025).

Phase 3 – Beyond (2025).



Foundation Projects

2016 to 2020 Foundation Projects

Description	Cost (\$)
Pipe Renewal	\$9,500,000
Private I/I Abatement	\$10,800,000
Digester Improvements	\$35,800,000
MS4 Compliance	\$4,900,000
Resource and Maintenance Needs	\$9,000,000
Program Costs	\$3,700,000
Systemwide Flow Monitoring/Model Update	\$1,300,000
Total	\$75,000,000



Advanced Action Projects

2021 to 2025 Advanced Action Projects

Description	Cost (\$)
Pipe Renewal	\$49,600,000
Private I/I Abatement	\$5,000,000
Priority SSO Projects	\$20,100,000
Treatment Equipment Renewal	\$23,100,000
MS4 Compliance	\$9,500,000
Resource and Maintenance Needs	\$11,400,000
Program Costs	\$4,700,000
LTCOP Reevaluation	\$1,600,000
Total	\$125,000,000



Proposed New Rates for Next 3 Years

Fiscal Year	2018	2019	2020
Rate Increase	5%	6%	6%

2014- Projected Rates for Next 3 Years

Fiscal Year	2018	2019	2020
Rate Increase	8.5%	9%	9%



Sustainable Energy Projects

Digester Improvements – Annual Savings (Starting Const)	\$738,000
Replace Motors with High Efficiency Motors – Annual Saving	\$61,000
Downsize Cryo Plant Air Compressor – Annual Savings	\$70,000
Optimize Oxygen Production – Annual Savings	\$41,000
Rotary Drum Thickener – Annual Savings	\$16,000
Lighting Upgrades- Annual Savings	\$5,000
Programmable Thermostats – Annual Savings	\$8,300
Boiler Replacement – Annual Savings	\$1,200
Add Weather Barriers	\$1,200
Replace Pickups with Golf Carts – Annual Savings	\$1,000



Proposed New Industrial Fees for BOD

Fiscal Year	2017	2018	2019	2020
Rate Increase	\$0.407/lb	\$0.300/lb	\$0.300/lb	\$0.300/lb

2014 – Projected Industrial Fees for BOD

Fiscal Year	2017	2018	2019	2020
Rate Increase	\$0.461/lb	\$0.500/lb	\$0.545/lb	\$0.594/lb



Proposed New Industrial Fees for TSS

Fiscal Year	2017	2018	2019	2020
Rate Increase	\$0.124/lb	\$0.124/lb	\$0.124/lb	\$0.126/lb

2014 – Projected Industrial Fees for TSS

Fiscal Year	2017	2018	2019	2020
Rate Increase	\$0.128/lb	\$0.139/lb	\$0.151/lb	\$0.165/lb



Inflow Reduction Successes

Peak Flow Reduction		
Sub-Basin	% Peak Flow Reduction	I/I Reduction Method
FC ₁₃	39%	Private
JC ₁₅	58%	Private
PR ₀₇	28%	Private
PR ₁₀	17%	Public
JC ₂₃	30%	Public
JC ₁₅	68%	Combination
JC ₃₀	43%	Combination



Comparison of Consent Decrees and Rates in Missouri's 3 largest Cities

	Kansas City	St. Louis	Springfield
Consent Decrees	\$4.5B	\$4.7B	\$200M
	Rates		
FY 16	\$53.35	\$40.72	\$28.11
FY 17	\$60.28	\$44.59	\$28.94
FY 18	\$68.11	\$49.31	\$30.64
FY 19	\$79.96	\$54.63	\$32.36
FY 20	\$86.96	\$60.44	\$34.20



Sewer Rate Comparisons

	Inside the City	Outside the City
Lebanon	\$20.37	\$20.37
Columbia	\$24.63	\$50.65
Ozark	\$28.48	\$42.73
Springfield	\$28.94	\$28.94
Joplin	\$29.90	\$38.90
Jefferson City	\$30.04	\$51.48
Nixa	\$30.15	\$39.60
Republic	\$44.23	\$66.36
Battlefield	\$44.70	\$44.70
Willard	\$47.88	\$55.08
Strafford	\$57.27	\$65.54
St. Joseph	\$63.28	\$146.66



Typical Monthly Bills

	Usage	2017	2018	2019	2020
Residential					
Small User	3 CCF	\$23.60	\$24.85	\$25.73	\$27.00
Avg. User	6 CCF	\$28.94	\$30.64	\$32.36	\$34.20
Large User	10 CCF	\$36.06	\$38.72	\$41.20	\$43.80
Non-Residential					
Small User	40 CCF	\$89.46	\$99.32	\$107.50	\$115.80
Med. User	60 CCF	\$125.06	\$139.72	\$151.70	\$163.80
Large User	100 CCF	\$196.26	\$220.52	\$240.10	\$259.80

Questions



*Protecting Water for Future
Generations*